

$$I(u,v)=R(u,v)\sum_i(\max((\vec{l_iLi}\cdot\vec{N}(u,v)),0)) \text{ ----- (1)}$$

$$I(u,v)=R(u,v)\vec{N}(u,v)\cdot\vec{L}\quad (\vec{L}=\sum_i l_i\vec{L}_i) \quad \text{-----} \quad (2)$$

$$S = [\vec{K}_1 \ \vec{K}_2 \ \dots \ \vec{K}_N]$$

$$V = \frac{1}{N} S S^T \quad \text{-----} \quad (3)$$

$$\frac{\sum_{i=1}^M \sigma_i}{\sum_{i=1}^N \sigma_i} \times 100[\%] \quad \text{-----} \quad (4)$$

$$\frac{\sum_{i=1}^M \sigma_i}{\sum_{i=1}^N \sigma_i} \geq 0.95 \quad \text{-----} \quad (5)$$

$$\vec{I}_c = \sum_{i=1}^M (\vec{I}_q \cdot \vec{B}_i) \vec{B}_i \quad \text{-----} \quad (6)$$

$$D=|\vec{I}_q-\vec{I}_c|^2 \quad \text{-----} \quad (7)$$

$$\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}, \frac{z_1+z_2}{2} \right) \text{-----} (8)$$

$$\begin{bmatrix} u_i \\ v_i \end{bmatrix} = \frac{f}{c} \begin{bmatrix} a \\ b \end{bmatrix} \text{-----} (9)$$

$$\begin{bmatrix} a \\ b \\ c \end{bmatrix} = R \begin{bmatrix} x_i \\ y_i \\ z_i \end{bmatrix} + \begin{bmatrix} T_x \\ T_y \\ T_z \end{bmatrix} \text{-----} (10)$$

$$R = \begin{bmatrix} \cos R_y \cos R_z - \cos R_x \sin R_z + \sin R_x \sin R_y \cos R_z & \sin R_z \sin R_x + \cos R_x \sin R_y \cos R_z \\ \cos R_y \sin R_z & \cos R_x \cos R_z + \sin R_x \sin R_y \sin R_z & -\sin R_x \cos R_z + \cos R_x \sin R_y \sin R_z \\ -\sin R_y & \sin R_x \cos R_y & \cos R_x \cos R_y \end{bmatrix} \text{-----} (11)$$